

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/723,898

Filing Date: 11/25/03

Applicant: Mead et al.

Group Art Unit: 1773

Examiner: Kevin R. Kruer

Title: PLASTISOL COATING CONTAINING REFLECTIVE PIGMENTS,  
METHOD OF PREPARING COATING ON A SUBSTRATE, AND  
PRODUCTS WITH SUCH COATINGS

Attorney Docket: 0906S-000336 (IN-5692)

---

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**Reply Brief Under 37 C.F.R. § 41.41**

Sir:

In response to the Examiner's Answer November 18, 2008, Appellants file this  
Reply Brief.

**Increasing the thickness of prior art capstock or laminate to provide essentially no transmittance of light of near infrared wavelength does not provide the presently claimed film or siding.**

Central to each of the three rejections under 35 USC § 103(a) is the premise that prior art capstock or laminate would be modified by a person of ordinary skill to provide essentially no transmittance of infrared (IR) light and a thickness of about 2-5 mils. To this end, the Krafft reference is applied for teaching that whiteness of a film can be increased by increasing the thickness. However, there is no instance where increasing the thickness of *any* prior art capstock or laminate to provide essentially no transmittance of IR light would result in a film or architectural siding of the presently claimed thickness.

The shortcomings of the cited references are summed up as follows. "Ravinovitch does not teach the claimed thickness" and "Stamper...does not teach the claimed thickness." Page 4, line 11 and page 7, lines 1-3 of the Examiner's Answer dated November 18, 2008. "Krafft teaches a light reflective white pigment in a binder and teaches the whiteness (herein understood to be synonymous with reflectiveness) of the film can be optimized by optimizing its thickness." Page 4, lines 13-15 and page 7, lines 5-7 of the Examiner's Answer dated November 18, 2008. There is no way to get to the present claims by combining and applying these teachings.

The only thickness provided in Ravinovitch is 450 mil capstock and the individual layers of the Stamper laminate have a thickness of 12-50 mils. Ravinovitch col. 4, line 58 to col. 5, line 1; Stamper col. 2, lines 21-41. Modifying either by increasing the thickness to provide essentially no transmittance of IR light, based on the Krafft

teachings, at best teaches a capstock of *greater than* 450 mils and a laminate layer of *greater than* 12-50 mils. Consequently, based on the Ravinovitch, Krafft, Sullivan, and/or Stamper references, there is no way for a skilled artisan to arrive at the presently claimed film or siding layer having a thickness of from about 2 mils to about 5 mils thick.

The Examiner has not made the apparent reason to combine or modify the references explicit to facilitate review, as required by *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. at 1740-41, 82 USPQ2d at 1396; see also *In re Kahn*, 441 F3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning to support the legal conclusion of obviousness.”). In the present case, the three rejections under 35 USC § 103(a) fail to provide any reason or suggestion for a skilled artisan to significantly reduce the reference materials’ thicknesses while simultaneously providing an amount of IR-reflective pigment so that there is essentially no transmittance of light of near IR wavelength. Hence the rejections are flawed and cannot support cases of obviousness.

**The Examiner’s extrinsic evidence fails to cure the defects in the three rejections under 35 USC § 103(a).**

In the Response to Argument, page 7 et seq. of the Examiner’s Answer dated November 18, 2008, several references are provided to apparently support the three rejections under 35 USC § 103(a). However, these references fail to overcome the deficiencies noted above on at least two counts.

First, as evidence of capstock thicknesses generally known in the art, the

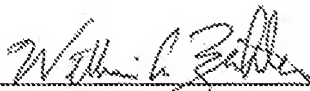
Examiner provides 2002/0177685 and 2002/0147246. However, a careful reading of these references reveals not a single disclosure of a film or layer from about 2 mils to about 5 mils; instead, both disclose capstock of 0.2 mm, which equals 8 mils. Thus, these references do not establish that a film or layer of about 2 to 5 mils is generally known or typical in the art.

Second, the Examiner states that "US 2003/020041 [sic] (0054) and US 2003/0103017 (0007) teach that pigment concentration and thickness each can be optimized in order to optimize the reflectance of a pigmented layer." Page 13, lines 11-14 of Examiner's Answer dated November 18, 2008. Appellants note that no published application exists for "US 2003/020041." Most notably, however, none of the three 35 USC § 103(a) rejections illustrates how a skilled artisan would vary pigment concentration in the capstock or laminate layer in view of increasing thickness to provide essentially no transmittance of IR light, as per Krafft. Thus, these references are not only absent from the present rejections, but the Examiner has failed to explicitly illustrate how their teachings would be applied to the Ravinovitch, Krafft, Sullivan, and/or Stamper references in order to render the present claims obvious.

For these and the other reasons discussed above, Appellants respectfully request that the rejection of claims 7, 10, 11, 13, 14, 16-20, and 24-26 be REVERSED.

Respectfully submitted,

Dated: Jan. 19, 2009

By:   
Anna M. Budde, Reg. No. 35,085  
William A. Ziehler, Reg. No. 61,415

Attorneys for Appellants

Harness, Dickey & Pierce, P.L.C.  
P.O. Box 828  
Bloomfield Hills, MI 48303  
(248) 641-1600

AMB/WAZ/akb